

ENVIRONNEMENT CANADA

ENVIRONMENT CANADA

)

SERVICE ATMOSPHERIQUE

ATMOSPHERIC SERVICE

JUNE 1971 JUIN



MONTHLY REPORT - JUNE 1971

Published Under Authority of the Assistant Deputy Minister Atmospheric Environment Service

)

	PAGE
Charles Carpmael - 1846-1894	1
Course Indoctrination - A Play in I Act	4
Upgrading the Meso-Meteorological Research Observation Facility	6
281530 GMT Report from the Front - by P.G. Aber	7
Donald Archibald, Chief of Basic Weather, Retires	7
Termination of Visual Aurora Observations	11
Thunder Bay Breakwater Incident	12
Exploitation de la Station Météorologique Cape Dorset par des Esquimaux	14
Weather Station at Old Crow Started	14
The Saint John Urban Climate Study	16
National Study on Climatological Drought and Precipita- tion Excess	16
RADAR Precipitation Data Integrator	16
Why is an Upsicle? - by W.E. Markham	17

 PAGE

 Sea State Information Workshops - Atlantic Region
 18

 Personnel
 18

 Trivia
 Professional Training Unit NOT First Forecast Staff at 4905 Dufferin - by P.G. Aber
 24

 Forget the Forecasters
 25

MONTHLY REPORT OF THE ATMOSPHERIC ENVIRONMENT SERVICE

JUNE 1971

CHARLES CARPMAEL - 1846-1894



This is the fifth in a continuing series of biographies of the early Directors of the Atmospheric Environment Service written by Dr. Andrew Thomson

A wrangler is one who has obtained first clause bonours for the gradua

Charles Carpmael was born September 19, 1846 at Streatham Hall, Surry, England. He was the sixth son and tenth child of a family of eleven of William Carpmael, surveyor and patent agent, and Sarah Patt.

Charles Carpmael was educated at Clapham Grammar School, showing in his school work an aptitude for mathematics. He entered St. Johns College, Cambridge in 1865, with a junior scholarship studying mostly mathematics for the next three years. In June 1868 he obtained a foundation scholarship and in 1869 he graduated as sixth wrangler.* In 1869 he received his M.A. degree and was a Fellow of St. Johns College 1870-1876. In 1870 he commenced the study of law and was admitted to the Middle Temple, London.

In 1870 he was a member of the British Expedition to Estepona in Spain (near Gibraltar) and took spectroscopic observations of the solar corona. In October 1872 Carpmael was appointed Deputy Superintendent of the Meteorological Service of Canada and in 1876 was appointed Superintendent of the Meteorological Service and Director of the Magnetic Observatory.

During his tenure of office, storm warnings were exhibited at ports all the way from the Gulf of St. Lawrence through the Great Lakes and became particularly valuable to shipping. Both corporations and public bodies had gone to considerable expense to be able to avail themselves of storm warning advice and in 1880 a total of 880 storm warnings were issued, an increase of 179 over the previous year. Of the 880 only 17 were too late to be of service. Local industries were becoming aware of the value of special weather forecasts to meet their individual needs. For example, in 1881 Lock & Co. of Colborne, Ontario, thanked the service for special forecasts writing - "Over one million dollars is lost every year through the discoloration of barley by rain. A considerable amount of this could be saved by (the use of) your reports".

Carpmael had a deep personal interest in astronomy and was a Fellow of the Royal Astronomical Society. He made a special study, at all available stations, of the weather in Southeastern Canada for the best location to observe the transit of Venus in 1881. Fredericton, N.B., was found the best, but observations could be profitably taken at Montreal and Toronto. The next transit of Venus will not occur until 2004.

On September 14, 1882, the steamer "Asia" foundered in a gale in Georgian Bay with a heavy loss of life. On account of the absence of northern reporting stations, no storm warnings could be given. On November 24 in a similar heavy gale in Lake Huron, all storm warning stations had 20 hours notice of the onset of the gale.

^{*} A wrangler is one who has obtained first class honours in the graduating class in Mathematics at Cambridge University.

The superintendence of the time service for Canada was given to Mr. Carpmael in 1883. The Toronto time signal was given, as formerly, by striking the fire alarm bells at 11:55 a.m. Arrangements were made with the Telegraph Company for the exchange of time signals with Quebec and St. John, N.B. The Quebec signal has rarely exceeded one second in error, but St. John's error has been larger than desirable. London, Ont. coordinated with the Toronto Observatory and paid all costs for the installation of the time service.

The first "Polar Year" from August 1, 1882 to September 1, 1883, required additional meteorological observations as well as the reduction of these observations to the form prescribed by the International Polar Year Commission. In recognition of the part played by Canada in her first entry into an international geophysical program, Mr. Carpmael was invited to attend the final meeting of the Commission in 1884 at Vienna. The Anglo-Canadian Polar Year party was established at Fort Rae, N.W.T., where extensive meteorological, magnetic and auroral observations were taken. At the end of the Polar Year, the British Meteorological Office instructed Captain Dawson, Chief of the British party, to leave behind a large number of meteorological instruments for use in the Northwest Territories.

Dr. Wild, Director of the Russian Meteorological Service, had correspondence with Mr. Carpmael regarding cooperation between the two national services in the Polar Year program. Unfortunately, nothing came of it, but so far as is known this is the first real effort for Canada and Russia to cooperate in international geophysical programs. Dr. Wild did arrange to obtain from Mr. Carpmael copies of magnetic tracings from the Toronto Observatory on disturbed magnetic days prescribed by the International Polar Year Commission.

A monthly magnetic review describing the more important magnetic disturbances which had occurred, was added in 1886 to the Monthly Weather Review published by the Meteorological Office. Continuous selfrecording photographic equipment was in operation throughout the year of 1886 for the magnetograph, thermograph and barograph. Similar equipment was in operation in Los Angeles and Hong Kong. Mr. Carpmael wished to determine, with the records from these instruments, if there were any connection between magnetic and meteorological phenomena. Research was hampered by a poor office library consisting, in 1887, of only 3,246 books and pamphlets almost entirely gifts and exchanges.

Mr. Carpmael made extensions each year to the storm warning service. In 1885, 745 of the 841 warnings issued were verified. The daily weather forecasts were carried on without interruption and in 1885 were published in both the morning and afternoon newspapers in the provinces for which predictions were made. With the construction of the C.P.R. railway to the Pacific Coast in 1883, the weather reporting stations were increased to twenty west of Winnipeg. The system of disseminating predictions by means of signal discs attached to railway cars was inaugurated in 1884 and was found to be successful. Many of the farming communities were provided, for the first time, with weather forecasts. Every day at 1:00 a.m. the Toronto Meteorological Office sent, to the railway agents, the weather signal to be exposed on the sides of the express car for that day. A large disc meant clear weather, a crescent moon meant showery weather, and a star meant rainy weather. After a number of years of success, the service had to be discontinued because of the failure of the railway clerks to change the weather signals for a number of days thus bringing the service into disrepute.

In 1885 a spectroheliograph, adapted to obtain more detail of sunspots by projection of the spots on a screen, gave satisfactory results and an entirely new field of studies of soil temperature observation was commenced as routine in 1886.

As an assessment of Mr. Carpmaels work, on December 31, 1888, there were 354 weather stations reporting to the Central Office, of which 27 were by telegraph, even though the grant for the fiscal year, including time service and other activities, was only \$55,600.

In 1882 Mr. Carpmael was appointed a charter member of the Royal Society of Canada. He was Vice-President of mathematics, chemistry and the physics section of the Society in 1882 and President of this section in 1883. On his death the Royal Society of Canada recorded that he had been one of its earliest and ablest members. He was on the Council of the Canadian Institute, later the Royal Canadian Institute, from 1880 to 1884, President from 1887 to 1890 and Councillor from 1890 to 1892.

Mr. Carpmael was married in June 1876 to Julia youngest daughter of Walter Mackenzie, Clerk of the County Court. His wife died in February 1882 leaving two children - one boy and one girl. Following a lengthy illness, Mr. Carpmael died in Toronto on October 20, 1894.

COURSE INDOCTRINATION - A PLAY IN I ACT

Scene: 4905 Dufferin Street, Downsview, Ontario.

Time: Sometime in the future.

Dramatis Personnae: Mr. Socrates Tibbles (no relation to L.G.); 1st student; 2nd student; 3rd student (female).

Act I

The curtain opens on a modern lecture hall, complete with vu-graphs, sliding chalkboards, and regression equations. A wise-looking, mature gentleman is leading the discussion.

- S.T: If you will look at this (produces vu-graph slide) chart you will note how our Service is organized.
- 1st Stu: By "our Service" you mean the Canadian Meteorological Service.
- 2nd Stu: I thought it was the Meteorological Service of Canada.
- S.T. I am afraid it is neither; since June 10, 1971, we have been known as the Atmospheric Environment Service.
- 3rd Stu: This then was the former Meteorological Service of Canada?
- S.T. Not quite; we have added responsibilities in the field of noise and air pollution.
- 1st Stu: Is that why we are located in Toronto?
- S.T: No, our historical roots go back to the founding of the Toronto Magnetic Observatory in 1839 and the establishment of the Meteorological Service of Canada in 1871.
- 2nd Stu: I understand we celebrated our centennial in 1971?
- S.T: Yes, unfortunately we expired the same year to be reborn as the Atmospheric Environment Service.
- 3rd Stu: The box at the top of the chart is obscure.
- S.T: I agree. Our Audio-Visual Unit has had quite a bit of trouble with that one. It started out as the Department of Transport and then became Ministry of Transport; now it is Department of the Environment or Environment Canada - whichever you prefer.
- lst Stu: Who is ADMA?
- S.T: ADMA is our Assistant Deputy Minister our boss; he was formerly the Administrator, before that the Director and when I joined the Service he was called the Controller.

2nd Stu: We seem to have trouble with nomenclature.

3rd Stu: Have we ever had a female ADMA?

S.T: No, but as you can see, we are not inflexible, there is room at the top for everyone.

1st Stu: What about the boxes below ADMA?

S.T: Now we are getting into a complicated situation; I suggest we save that for the next lecture.

- finis -

UPG RADING THE MESO-METEOROLOGICAL RESEARCH OBSERVATION FACILITY

Significant improvement in data quality, quantity and availability-in-digital-form will result from upgrading actions now in progress for the strip chart multi-sensor station network component of the above facility. This action is in line with observational research requirements that are being generated by the increasing stress on environment quality and meteorological prediction on scales of miles and minutes, up to tens of miles and hours. Other upgrading actions are on the drawing board, e.g. development and acquisition of special mobile observational facilities, use of new types of sensors, sounding equipment for the lowest few thousand feet, etc.

The present action provides the following:

- (a) Modification of all autographic strip chart recorders to accommodate 30 day roll charts. This has been accomplished by use of a stepping motor that advances a small increment once a minute.
- (b) Accurate time referencing and drastic improvement in time resolution with a chart speed of 24 inches per day. (Compare with 2 inches per day on previous equipment.)
 - (c) Wind directions to 16 points instead of 8, by the use of an extra pen on the modified form of the type 45 anemograph.
 - (d) Digital output from any charts by use of a manual curve-follower and electronic digitizer providing input to a PDP 15/20 computer which edits, summarizes and records the data on magnetic tape.

Advantages of the system consist first, in elimination of dependence on volunteer chart changing which implies much greater flexibility in location of stations, and secondly in a sizeable dollar saving as compared with multi-channel electro-magnetic recording. Specifications of items (a) to (c), proposed by the Meso-Scale Prediction Research Unit, were modified, engineered and installed, by Instrument Division, while site modification and deployment was by the Forecast Research Section, Observational Services Unit.

281530 GMT REPORT FROM THE FRONT

by P. G. Aber

The Professional Training Unit, acting as the Atmospheric Environment Service's shock troops, occupied the new Headquarters building 1230 GMT, June 14, 1971. Resistance was sporadic, but as was to be expected in a war zone, the amenities of everyday life was among the first casualties. As a result of initial resistance, a brief strategic withdrawal was ordered, but by D-day plus seven, seven facilities had been liberated on two floors and a permanent beach-head was established in the northeast corner of the building. Delaying actions involving air-conditioning and points of access were still in progress as this report was being written, but hopes are still high for a speedy victory and a complete take-over by the middle of July.

-----30-----

DONALD ARCHIBALD, CHIEF OF BASIC WEATHER, RETIRES

More than 150 friends and colleagues of Donald C. Archibald gathered at a dinner in the Great Hall, Hart House, University of Toronto, to honour the retiring Chief of the Canadian Meteorological Service's Basic Weather Division. As fitting tribute to a senior meteorologist, skies cleared during the afternoon to provide a pleasant sunny outdoor setting for the social hour in the East Quadrangle prior to the dinner.

After Grace by Stuart Archibald, the toast to the Queen was proposed by the Chairman for the evening, Frank Benum. At the conclusion of the dinner, the Chairman introduced the speakers of the evening who had been selected to highlight three of the many meteorolological areas in which Don Archibald had made major contributions during his 41 years in the Public Service.

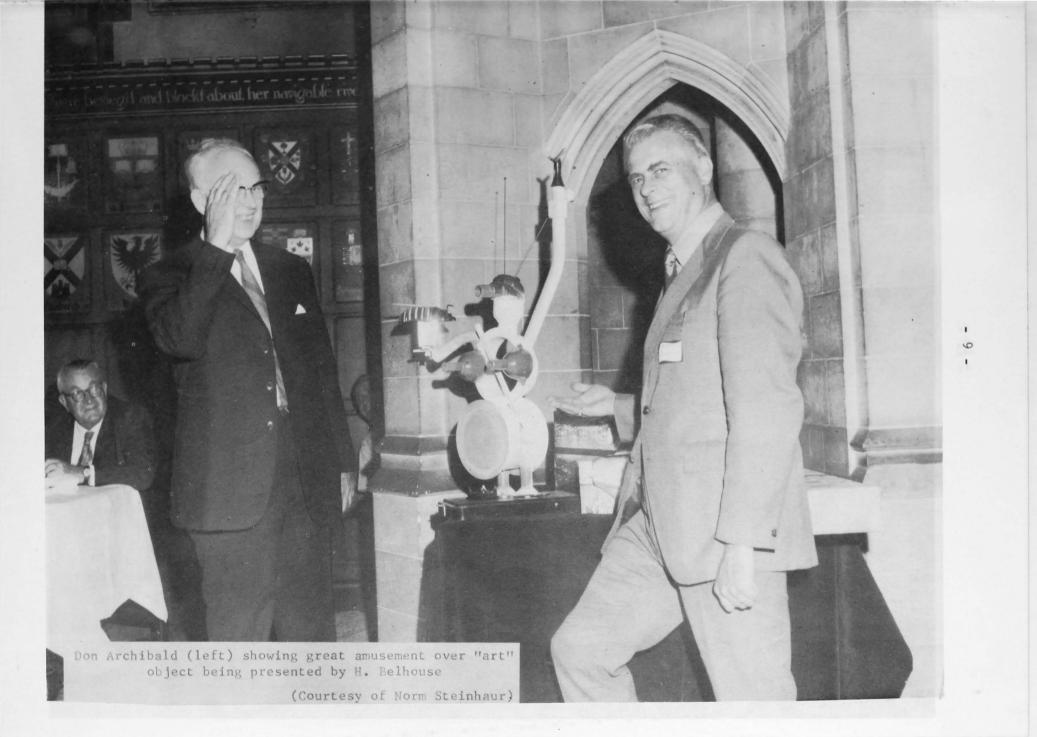
D.B. Kennedy, Director of Meteorology and Oceanography, Canadian Forces Headquarters, described a number of humourous incidents in connection with Mr. Archibald's opening of the first weather service outlets in the Western Provinces. J. Glenn Dyer, representing the U. S. National Weather Service, spoke warmly of the personal and professional relationships which had been achieved between the U.S. and Canadian meteorological authorities in the establishment and operation of the Joint Arctic Weather Stations. He referred particularly to Mr. Archibald's unfailing courtesy and dedication and to his vision in anticipating the potential of the Arctic in years to come. Admiral A.H.G. Storrs, Director of the Marine Operations Branch, Ministry of Transport, spoke about Mr. Archibald's contribution to the ice service program in Canada and cited as a specific example the support provided for the precedent-breaking voyage of the MANHATTAN in 1969. Canada's acknowledged leadership in ice information service is largely due to Mr. Archibald's efforts and intimate knowledge of Arctic ice conditions.

Interspersing the tributes to Mr. Archibald were a number of presentations. W. Stewart presented a barometer on behalf of the Atmospheric Service; D. Buss presented a framed collage of the crests of the Joint Arctic Weather Stations from present and former JAWS staff; T.B. Kilpatrick presented an engraved commemorative plaque from present and former ice observers and H. Belhouse, on behalf of the Instrument Division, offered the crowning gift - an ingenious "art"(?) object incorporating a number of symbols of Mr. Archibald's hobbies (beekeeping, photography, ham radio, gardening).

Mrs. Archibald (Dr. Marguerite Archibald) was presented with a bouquet of roses by Mrs. P.A. Daley, Mr. Archibald's longtime secretary. In response, Mrs. Archibald referred warmly to the pleasant memories she and the Archibald children had accumulated through their association with the meteorological service over the years.

A special speaker was Mr. Robert Shaw, Deputy Minister of the newly formed Department of the Environment of which the former Canadian Meteorological Service is now a part. Mr. Shaw in his informal remarks stressed his lack of knowledge of the science of meteorology, but recalled his earlier associations with the weather service in connection with construction activities in the north. He joined with his newly-acquired colleagues in paying tribute to Mr. Archibald and to wish him well.

Mr. J.R.H. Noble, Assistant Deputy Minister, Atmospheric Environment Service, then took over the podium to add his thanks and appreciation for Mr. Archibald's major contributions to the Canadian Weather Service. He emphasized that the three areas selected for special note were, in fact, only representative of numerous equally important contributions





which Mr. Archibald had made. Mr. Noble advised that Mr. Archibald had been awarded the 1970 Patterson Medal in recognition of his role in Canadian meteorology. Mr. Archibald had been unable to attend the Canadian Meteorological Congress at which the medal is normally presented, so, fortuitously perhaps, it could be presented at the Retirement Dinner. Finally, Mr. Noble presented to Mr. Archibald, on behalf of his many friends and colleagues, a number of gifts including a movie projector, a movie camera and screen.

In his gracious "thank-you" speech and farewell, Mr. Archibald reminisced about some of the events and individuals he had met during his long career, and concluded by assuring his friends that he had many activities to keep him busy in retirement and that the gifts presented would greatly enhance his enjoyment.

Mr. and Mrs. Archibald and their family then moved to the reception area where they received the best wishes and "au revoirs" of the dinner guests.

TERMINATION OF VISUAL AURORA OBSERVATIONS

On June 30, 1971, the Visual Auroral Observing Program in Canada will terminate after 14 years. Currently, 44 CMS stations are participating in hourly observations of the aurora borealis.

The program originated as an International Geophysical Year project, when on July 1, 1957, the Visual Auroral Network was established. Included in this network were selected CMS stations which co-operated with the National Research Council in basic detailed study of the aurora.

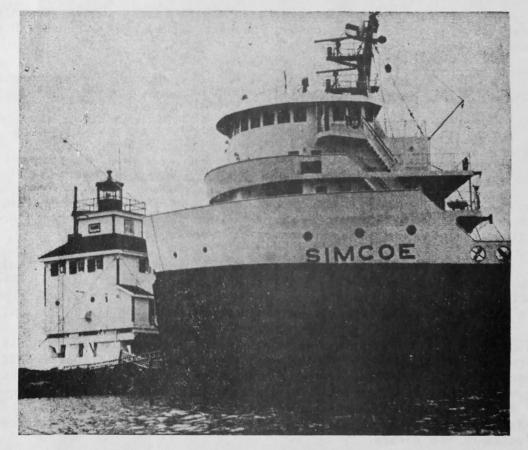
The synoptic program of visual auroral observations is being terminated at the request of N.R.C. due to reductions in their staff and research budget. It is, however, gratifying to learn from N.R.C. that observations by our observers have contributed in establishing a unique file of data that cover well over one solar cycle and from which significant research material is continually being drawn to assist in statistical studies of the aurora.

Dr. P.M. Milmann, who headed up the auroral program for Canada, will be retiring this summer.

THUNDER BAY BREAKWATER INCIDENT

The following are some clippings cut out of Thunder Bay News Chronicle and Times Journal depicting the hazards involved in navigating through the Thunder Bay breakwater. The incident which occurred just before noon on Saturday, May 15 this year, knocked out all of the lighthouse's navigational aids and has resulted in it being unattended since.

Thunder Bay Office is affected to some extent, since daily lake temperature readings were obtained from the staff at the same lighthouse and transmitted with the 1800Z synoptic observation. This service has, of course, been discontinued.



VESSEL CHECKED — Canada Steamship Lines' Simcoe leaned against the breakwall in Thunder Bay Harbour after coming into collision with the man-made barrier at noon Saturday. Divers were sent down to check the vessel. However results of their investigation were not released. The Simcoe left at 9:39 p.m. after the inspection. An investigation into the cause of the accident is taking place.

-T-J Staff Photo



NO TEA PARTY THIS!

It was a far cry from a tea party when News-Chronicle Women's Page Editor Margaret Raynard took this picture of a ship in trouble Saturday morning. Carried over rough water to her

destination by Paul Kusznier clambered aboard the grain carrier Simcoe for this closeup of the lighthouse. The Simcoe, apparently driven by strong winds, had been forced in for

an unscheduled docking, a the day freed herself from the breakwater rocks with minor damage and vo injuries.

EXPLOITATION DE LA STATION METEOROLOGIQUE CAPE DORSET PAR DES ESQUIMAUX

Il s'est écoulé environ un an depuis que la Région météorologique du Québec a inauguré une station à contrat, d'observations de surface, à Cape Dorset sur la Terre de Baffin et il semble donc approprié à cette date de donner un compte-rendu de cette expérience.

L'entrepreneur de la station, qui, incidemment est le gérant de la co-opérative locale, est un ex-technicien météorologique et possède donc une certaine expérience dans le domaine des observations, même si cette expérience n'est pas récente.

Son personnel-observateur se compose de trois Esquimaux qui furent recrutés à Cape Dorset. Le niveau académique de ces indigènes est de six à sept années de scolarité.

Après une période de formation par notre instructeur régional, au Bureau météorologique de Frobisher et aussi sur les lieux à Cape Dorset, le programme d'observations a débuté à la date prévue mais non sans difficultés, à cause surtout des problèmes de communication électronique avec Frobisher et aussi de communication verbale car les Esquimaux connaissaient peu la langue anglaise.

Le programme d'observations météorologiques à Cape Dorset consiste présentement de 14 observations horaires, de 4 observations synoptiques et d'un programme complet de climatologie.

Contrairement au mythe qui voulait que les Esquimaux ne puissent apprendre un sujet aussi technique que la météorologie, les résultats obtenus jusqu'à ce jour sont encourageants, même si la qualité des observations est encore inférieure à la moyenne pour les stations météorologiques à contrat. Nous suivons de près le programme à Cape Dorset et nous sommes convaincus de la rentabilité d'employer des indigènes (esquimaux ou indiens) dans les endroits isolés de notre pays.

Comme preuve de notre conviction que l'exploitation de la station Cape Dorset par des esquimaux réussira d'une façon permanente, nous planifions maintenant une deuxième station d'observations avec des esquimaux, et cette fois à Koartak tout près de Cape Hopes Advance.

WEATHER STATION AT OLD CROW STARTED

Weather observations on a regular basis from Old Crow, Y.T., started on May 24th. Three young eager people, native Loucheaux Indians of the village were trained by Meteorological Inspector Tom Donnelly from Edmonton, early in May and are now on their own.

Each morning starting at 6 A.M. one of the observers, Roger Kaye, his sister Rosy or Diane Tizya sends the observation by radiotelephone to Whitehorse, and this is repeated every three hours until 9 P.M.



Diane Tizya (left), and Rosy Kaye reading the thermometers on their first day of official observations at the new weather station at Old Crow. This station is the first in Canada to be operated by Indians

These three observers are employed by the Old Crow Co-Op, an Indian run association which has contracted with the Canadian Meteorological Service, of the new Department of Environment, to take regular observations. This is a breakthrough for the A.E.S. in an effort to use indigenous people where possible in the north for weather observing, and it is hoped that the number of such stations can be increased in the next few years.

The steadily increasing activity in the north in social development, mineral explorations and scientific projects, is resulting in a demand for a much expanded and diversified weather service. Old Crow will partially serve this need in the northern Yukon, and will also help in forecasting winter outbreaks for southerners. It also fills a great gap in reports needed for flying, the principal means of transport in the far north.

Old Crow is some seventy miles inside the Arctic Circle, and about 250 miles north of the gold rush capital Dawson City.

THE SAINT JOHN URBAN CLIMATE STUDY

Ten special stations have been established in various sections of the City of Saint John, N.B., and surrounding area. Of these, six measure temperature and precipitation, one measures wind and precipitation including rate of rainfall, and three measure wind. These stations will be operated for a period of one year, after which a report will be issued on the urban climate of the area.

NATIONAL STUDY ON CLIMATOLOGICAL DROUGHT AND PRECIPITATION EXCESS

Messrs. G.A. McKay and P.M. Chaine of the Climatology Division have completed a paper on the above-noted study which has been submitted for presentation at the July meetings of the Agricultural Institute of Canada in Lethbridge, Alberta.

Climatological precipitation measurements are the basis for the study which provides an indication of the intensity of droughts of a given return period and duration and relating to key agricultural dates. The drought (or excessive rainfall) intensity for any return period and duration may be easily determined from the median, the appropriate assumed standard deviation, and a frequency factor.

RADAR PRECIPITATION DATA INTEGRATOR

Nineteen reels of 35 mm CAPPI radar photographs were received from the research radar (Meteorological Research Station) during June. This film is the first operational output of the new ancillary equipment on the Woodbridge radar and covers most periods with rain from 25 May to 21 June, 1971 (240 rain hours). Work has started on checking the compatibility of this film output with the PDI equipment. The comparisons of radar estimates of rainfall to rain gauge measurements will begin after the move to the new Headquarters building.

WHY IS AN UPSICLE?

- 17 -

by W.E. Markham

For most members of the Service, mid-summer is a time for vacations, for enjoyment of the outdoors and sometimes for restricted activity because of the heat and humidity. Here is a cooling thought or two to help forget that problem and at the same time to present another one.

The photograph below was taken by Mr. E. Banke of Bedford Institute last March. He was at that time doing a detailed wind stress study at the Polar Continental Shelf Project Camp in the northern Beaufort Sea - roughly $74^{\circ}N$ $135^{\circ}W$. The picture was taken in the evening with the temperature about $-30^{\circ}F$. The area between the camera and the pressure ridge in the background is a refrozen lead with ice about 12-18" thick.



Everyone is familiar with Popsicles, icicles, and even Fudgicles, but what and why are the little spikelets of ice accidentally caught in this picture? Upsicle is not a bit scientific, but it does have a real cool ring to it. They are not related to the snow cover, for that had fallen in the previous 24 hours. There is no reference to such a phenomenon in any of the technical books about the polar regions and yet there they are standing up as plainly as weeds on a new lawn. Does their height have any relation to recent temperatures? How does salinity of the sea water affect their diameter? Do they come in several flavors? Is the spacing regular? Why don't they bend like the cream on top of a frozen milk bottle? What about the wind? Why are they there, how were they formed and why don't they occur more frequently?

Perhaps these are mounds thrown up by the burrowing of the legendary ice worm and if so, where are the worms? This photograph represents one of those "strange things done 'neath the midnight sun". Who has seen or even heard of them before??

SEA STATE INFORMATION WORKSHOPS - ATLANTIC REGION

A successful Sea State Information Workshop was conducted at the Halifax International Airport on June 28th and 29th, 1971. The purpose was to present some of the theory of air-water interaction and some of the practical procedures used in sea state forecasting to the professional staff of the Atlantic Weather Central and the Maritimes Weather Office in preparation for involvement in a sea state information service for the Atlantic coastal waters.

The workshop consisted of a full day's program to which several cooperating agencies contributed. Mr. Wm. Bernard of Mobil Oil spoke on some of the operating problems encountered by off-shore drilling rigs; Dr. Hans Neu of the Bedford Institute of Oceanography presented some of the theory of waves and described some of his recent studies on the propagation of ocean waves; Mr. M.R. Morgan, Officer-in-Charge of the Maritime Forces Weather Centre conducted a laboratory session on the analysis and predictions of wave heights.

In order to provide for the attendance of as many of the practicing forecasters as possible, the workshop was given on two successive days. Mr. J.A.W. McCulloch of Met. Headquarters presented the theoretical portion on the second day.

Similar workshops are slated for Gander and Goose Weather Offices in the latter part of July.

PERSONNEL

The following have accepted positions as a result of recent competitions:

Competition 71-MET-CC-11		Meteorology (MT) 9 Superintendent, Water & Ice Section Basic Weather Division AES Headquarters - G.H. Legg
Competition 71-MET-CC-12		Meteorology (MT) 9 Superintendent, Surface Section Basic Weather Division AES Headquarters
		- W.W. Stewart
Competition 71-MET-CC-21	-	Meteorology (MT) 4 Meteorological Instructor CFWO Cold Lake, Alta.
		- H.A. Austin

The following transfers took place:

R.L. Berry	-	To 22 NRWC North Bay From CFB Bagotville
G.D. Macknee	-	<u>To</u> W.O. Winnipeg <u>From</u> CFB Gimli
J.C. McLeod	-	<u>To</u> CFB Moose Jaw <u>From</u> CFB Gimli
R.G. Taylor	-	To CFB Uplands From W.O. St. Hubert

M.Sc. Graduates 1971:

W.S. Appleby	-	To W.C. Halifax From University of Toronto
C.B. Chouinard	-	To Central Analysis Office From McGill University
P.Y.T. Louie		To Climatology Division (project) From University of Toronto

Mrs. Eva Dojc

Eva Dojc joined the Personnel Administration Section, June 21, 1971, through the Administrative Trainee Program sponsored by the Public Service Commission. The Administrative Trainee Program aims to capitalize on the potential of recent graduates like Mrs. Dojc through direct assimilation into the administrative work environment. It is normally of 2 years' duration and is culminated by appointment into an appropriate occupational group.

Mrs. Dojc graduated from the University of Toronto with a B.Sc. degree specializing in psychology. Her previous experience involves extensive social psychology research and marketing research.

WEATHER OFFICIAL IS HONOURED FOR SERVICE





PIN PRESENTED — Norm Seguss, officer in charge of the Mount Forest Surface Weather Station, received a pin from George Pincock, Regional Meteorologist, Ontario Region, which commemorated 25 years of service with the Department of Transport. The presentation was made at an informal gathering at the station last Thursday. Staff Photo

PERSONAL GIFT — Norm Seguss, officer in charge of the weather station, was presented with a personal gift by John Corley on the occasion of his 25th anniversary with the Department of Transport, responsible for the station. An informal Thursday morning gathering marked the occasion. Staff Phot Normal Seguss, Officer-in-Charge of the Mount Forest Surface Weather Station, was presented with a pin emblematic of his twenty-five years service with the Ministry of Transport in a brief presentation ceremony at the Weather Office.

Present for the presentation were Mr. G.L. Pincock, Regional Meteorologist, Toronto; R.S. McMaster, Regional Supervisor of Observational Services, Toronto; Mayor Russel Neal; John (Duke) Lemaich; Mr. and Mrs. John Corley, personal friends of Mr. and Mrs. Seguss; Mount Forest station staff members, Len Lauzon, David Neal, Chris Strube and Dave Dodds; Mrs. Seguss and daughter Kathy, and Mary Ann Burns, a friend of Kathy Seguss; and Steve Calen, Inspector, who was at the station on a routine inspection.

Mr. Seguss, in reality, has over twenty-six years of service to his credit, but a foul-up in dates delayed the presentation of the award. An Ottawa boy, he first entered the service on November 15, 1944, at Ottawa airport, after three weeks of on-the-job training before taking over his own shift. He left Ottawa on January 3, 1946, for Winnipeg for ten days special training enroute to Churchill to help cover the military exercise Muskox to work out vehicular traffic across previously untravelled terrain. He arrived at Churchill, about 500 miles north of Winnipeg, on January 13, 1946, and remained there until October 1948, when he was transferred to Malton Airport. In November 1949, he was married to the former Lila Condie and in May of 1950 was transferred to Kapuskasing where he remained until May of 1957 when he moved to the Hamilton City Weather Office. After two years in Hamilton he went back to Kapuskasing as Officer-in-Charge, remaining until the end of 1961 when he came to the Mount Forest office, which opened at midnight January 1, 1962.

RETIREMENT - A.R. BERRY - T.F. SUTHERLAND

A dinner-dance attended by over 100 persons was held on the evening of June 30, 1971, in the East St. Paul Canadian Legion Hall in honour of Mr. A.R. Berry and Mr. T.F. Sutherland on the occasion of their retirement from the Canadian Meteorological Service.

Tommy Sutherland, in his twenty-three years with the Meteorological Service, worked at the Winnipeg International Airport in the Communications Centre of the Weather Office and was a Shift Supervisor at the time of his retirement.

Ross Berry retired after more than thirty-three years with the Meteorological Service of Canada. Except for two and a half years when Ross was on loan to the World Meteorological Organization in Pakistan and Meteorological Headquarters as a Communications expert, Ross spent his entire career as Supervisor of the Meteorological Communications Network in Central Canada. Ross saw and was actively involved in the development of a communications system that spans from box car morse code and spark-gap transmitters to the complex communication systems we have today, including high speed teletypes, computerized circuits facsimile and infinitum. Ross, in his position, with his genial personality, created friends from coast to coast, not only within the Department but also with communication agencies outside the Department.

Members of the Central Regional Office, Meteorological Headquarters and Ministry of Transport; members of the Winnipeg Weather Office and Prairie Weather Central; members of the Canadian National - Canadian Pacific Telecommunications and many other friends gathered on this night of June 30th to pay tribute and extend best wishes to Ross and Tommy.

Guests from outside the immediate Winnipeg area included:

- Judy and Dave McIntosh, Toronto daughter and son-in-law of Ross and Alice Berry;
- Deane Smith, Edmonton Regional Meteorologist, Western Region;



Tom Sutherland (left), receiving best wishes from Mr. Van Gordon



Les Carlson (left), presenting Ross Berry with a gift. Ross' wife Alice looks on



Ross and Alice Berry receiving best wishes from Mr. D. M. (Mel) Robertson

- 23 -

- Larry Nelson, Edmonton - Superintendent Radio Regulations, Edmonton Region;

- Les Carlson, Toronto - Teletype Supervisor Meteorological Headquarters.

A presentation to Mr. Tom Sutherland of a suitably engraved barometer, was made by Mr. Van Gordon, Officer-in-Charge of the Prairie Weather Central on behalf of Tom's many friends in the Region.

Mr. Les Carlson presented Mr. Ross Berry with a set of matched weatherproof speakers, intended for use with Ross' sterio tape recorder at his new home on Lake of the Woods, Sioux Narrows, Ontario. This gift was presented on behalf of Ross' friends at Meteorological Headquarters, the other Regional Offices and various outlying Weather Offices in the Central Region.

The Regional Meteorologist, Central Region, Mr. D.M. Robertson, presented a barbecue unit, complete with the necessary tools and clothing to Mr. Ross Berry from his friends in the Regional Office and at the Winnipeg International Airport.

Time moves on, and for those of us who continue at our desks, we regret seeing people like Ross and Tommy leave, but at the same time, we take pleasure in wishing them a happy, long and well deserved retirement.

Addresses:

Mr. T.F. Sutherland, 123 Kingston Row, St. Vital, Winnipeg 8, Manitoba.

Mr. A.R. Berry, c/o General Delivery Sioux Narrows, Ontario.

TRIVIA

Professional Training Unit NOT First Forecast Staff at 4905 Dufferin

Kim, a two year old, $18\frac{1}{2}$ inch, brown coated groundhog welcomed Professional Training staff to the new Headquarters building last week. Kim was first noticed performing callisthenics on grounds belonging to the University of Toronto. It was later ascertained that these were temporary quarters and a move to 4905 Dufferin was anticipated following the official take-over of the building. Questions as to whether Kim was male or female were met by evasions. "That's really not important as long as the other groundhogs can tell! I've been in the forecast business all my life; as long as I do my job, sex shouldn't come into it." Professional questions were answered in more detail and with more enthusiasm. "It's quite true we've been limiting outselves to one long-range forecast a year, but this is about to change. As a result of a wide program of observations which we were able to integrate into an energy budget study for the whole earth, we are now able to correlate instantaneous insolation at any point with future departures from climatic means for that same location. I myself am experimenting with the effect that different silhouettes have on the regression coefficients of our equations. That's why I'm doing these relaxation exercises."

It's worthy of mention that Kim won his appointment to the GRBL Division in an open competition. There are many other groundhogs qualified in this new technique Kim assures us, and, should other Divisions desire to fill vacant positions, Kim is prepared, he informed us, to perform as a member of the rating board.

Forget the Forecasters

(Reprinted from "Notebook", Toronto Telegram, Saturday, June 12, 1971).

Train whistles once predicted the arrival of trains.

Did you know they also predicted the arrival of rains?

Many summers ago, I toiled in the fields of farmer friend John Devereaux. He had no radio for hourly weather bulletins. Nor did he possess barometer, thermometer or weather vane.

But, like all who work with nature, John Devereaux could read messages from the atmosphere and from creatures that do dwell therein.

A CPR line to Milton ran through Hornby about six miles south of his farm. "When you can hear the CPR whistle," John would announce, "there will be a change in the weather in 24 hours." There would be. His forecasts were uncanny in their accuracy.

How many millions are spent annually on weather satellites, balloons, ships, radar and observation stations? How many acres of charts are squiggled over with isotherm and isobar lines?

Does anyone still listen for train whistles or air horns as they now are? Years ago, an elderly Indian near Cornwall predicted a tough winter from the thickness of corn husks. In the wilds, thick fur on a muskrat is said to mean the same thing.

In our modern, split-levels, our high-rise glass and concrete catacombs, we are confused. Does a thin muskrat coat mean a mild winter? No. Only that some husband's wallet will be thinner in replacing it. We're hopeless and we're helpless. Babes we are in woodsless suburbia. Spoon-fed from stratospheric balloon samplings; brain-washed with wet-bulb thermometer readings. We're struck out with the weatherman's .800 batting average.

And yet, for the wary, signs still abound warning of weather variations. We have but to learn to read them. What brings on a threeday, airline-stopping fog? Easy. A three-day break in which you planned to fly to Vancouver.

You're told by the weatherman that a front from the gulf brought that six inches of dirty, squishy slush? Nonsense! You know very well it was the \$2.50 spent on a car wash the day before.

The pattern is predictable right down to the final flurry, the tiniest pitter. It's framed in immutable laws as irrevocable as the rythmns of the universe.

Remove storm sashes for a mid-May heat spell a cold snap follows. Substitute toe rubbers for commuter boots on a mild winter day you wade home wet-footed in 10 inches of snow.

Our ancestors were warned of weather's wiles with handy little maxims. But "red sky at night, sailor's delight" is meaningless to the modern traveler. Scrunched up in underground subways, he sees no sky only provocative ads for ladies' undergarments. What red-faced sailor could take delight in that?

I'm starting a list of modern maxims specially suited to 20th century man and his surroundings. Some day they'll replace Farmers' Almanac in every rural kitchen.

Television weathermen Dave Devall and Percy Saltzman will be phased out and their time slots filled with additional stomach aid announcements.

Here's my list. Copy it, add to it if necessary. But keep it handy in purse or wallet. It could save you a soaking.

> "Paint patio chair; for dust storm prepare. Rain barrel set out; sure to bring drought. Fuss hours with hair; of high winds beware. Run sprinkler all night; cloudburst by first light. Pack pickles and cheese"

Oh, oh sorry to interrput. Got to run. It's starting to rain and

Wait! What did I say? RAIN? Impossible! It CAN'T be rain. I left my car windows CLOSED!

James Emmerson Telegram Staff Reporter